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	1	Wu et al. "Ori	gin of Nan	PATENT LITERA	TURE DOCUM	ENTS				
	AA	Wu et al., "Ori	grn or Nan	omecuanicai (Cantilever	Motion	Genera	ted		
		from Biomolecul	man OP(4)	cions," Proce	edings of	the Nat	tional			
		Academy of Scie	nce, 98(4)	, 2001, pp.	1560-1564.					
	AR	123 August 187	flace Stre	ss Curves for	Gold," J.	Elect	cochem.	Soc.,		
	•••	Lin et al. "Surface Stress Curves for Gold," J. Electrochem. S AB 123, August 1976, pp. 1145-1151.								
		Lee, "Microactua	ation by Co	ontinuous Ele	ctrowetting	g and E	Clectro	wetting		
	AC	Lee, "Microactua Theory, Fabricat	ation by Co	ontinuous Ele	" Diccort	g and E	lectro	wetting		
	AC	Lee, "Microactua Theory, Fabricat of California, I	ation by Cotion, and I	ontinuous Ele	.," Disserta 1-173.	ation,	Univer	sity		
	AC	Lee, "Microactua Theory, Fabrica of California, l Lundbaek et al.,	ation by Co tion, and I Los Angeles	ontinuous Ele Demonstration 3, 2000, pp.	1," Dissert: 1-173.	ation,	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr	ontinuous Ele Demonstration 3, 2000, pp.	1," Dissert: 1-173.	ation,	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabrica of California, l Lundbaek et al.,	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr	ontinuous Ele Demonstration 3, 2000, pp.	1," Dissert: 1-173.	ation,	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr	ontinuous Ele Demonstration 3, 2000, pp.	1," Dissert: 1-173.	ation,	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr	ontinuous Ele Demonstration 3, 2000, pp.	1," Dissert: 1-173.	ation,	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr	ontinuous Ele Demonstration 3, 2000, pp.	1," Dissert: 1-173.	ation,	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse 1997, pp. 5695-5	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr 5701.	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	ostatic Ene	ergy, Cotechno	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr 5701.	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	ostatic Ene	ergy, Cotechno	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse 1997, pp. 5695-5	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	1," Dissert: 1-173.	ergy, Cotechno	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse 1997, pp. 5695-5	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr 5701.	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	ostatic Ene	ergy, Cotechno	Univer	sity		
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	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse 1997, pp. 5695-5	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr 5701.	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	ostatic Ene	ergy, Cotechno	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse 1997, pp. 5695-5	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr 5701.	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	ostatic Ene	ergy, Cotechno	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse 1997, pp. 5695-5	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr 5701.	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	ostatic Ene	ergy, Cotechno	Univer	sity		
	AC AD	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse 1997, pp. 5695-5	ation by Co tion, and I Los Angeles , "Lipid Bi embly of Gr 5701.	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	ostatic Ene	ergy, Cotechno	Univer	sity		
MINER	AC	Lee, "Microactua Theory, Fabricat of California, I Lundbaek et al., Stress, and Asse 1997, pp. 5695-5	ation by Cotion, and I Los Angeles, "Lipid Bi embly of Gr 5701.	ontinuous Ele Demonstration 3, 2000, pp. Llayer Electr camicidin Cha	ostatic Ene	ergy, Cotechno	Univer	sity		

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		1	•	nomechanical Cantilever		•				
Copy	AA	1		ctions," Proceedings of	the Na	icionai				
		Academy of Science, 98(4), 2001, pp. 1560-1564. Lin et al., "Surface Stress Curves for Gold," J. Electrochem. Soc.,								
	АВ	123, August 197			. Breck	ocnem	. 500.7			
	AC	Theory, Fabrica	tion, and	Continuous Electrowetti Demonstration," Disser es, 2000, pp. 1-173.						
V	AD	Lundback et al. Stress, and Ass 1997, pp. 5695-	embly of (E Gramicidin Channels," B	iotechr	nology,	36,			
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			NON	PATENT LITERATURE DOCU	MENTS				
		FRITZ et al., "	Translatir	ng Biomolecular Recogni	ition in	ito			
10.20	AA			Vol. 288, 2000, pp. 3					
CDA		, , , , , , , , , , , , , , , , , , ,							
	<b>†</b>	WU et al., "Bio	assay of r	prostate-specific anti-	gen (PSA	) usino			
[	AB	· ·		Biotechnology, Vol.	=	-			
		860.							
		Subramanian et	al., "Gluo	cose biosensing using a	an enzym	e-coate	:d		
	AC	ł ·		d Physics Letters, 81(	-				
		387.							
		Hagan et al., "	Nanomechar	nical Forces Generated	by Surf	ace Gra	fted		
	AD	DNA," Journal c	of Physical	l Chmistry, B 106, 200	2, pp. 1	0163-10	173.		
	<u> </u>			•					
- 1				sed Piezoresistive Mec	hanical	Sensor,			
1.	AE	IEEE Workshop o	on MEMS, 20	002, pp. 320-323.			•		
	-					<del></del>	<del></del>		
ļ		Lin et al., "Surface Stress Curves for Gold," J. Electrochem.							
	AF	Soc., 123, 1976	, abstract	t only.					
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	700			Measurements of 1-D and Microfluidic Channels					
	AG	1		Microfluidic Channels					
		<del></del>	Films, "Anal. Chem., Vol. 73, No. 22, 2001, pp. 5525-5531.  Savran et al., "Fabrication and Characterization of a Micromechanical						
1	АН								
		Sensor for Differential Detection of Nanoscale Motions," J. of Microelectromechanical Systems, Vol. 11, No. 6, 2002, pp. 703-708.							
	<del> </del>	· · · · · · · · · · · · · · · · · · ·			~~~~				
	Berger et al., "Surface Stress in the Self-Assembly of Alkanethiols on Gold," Science, Vol. 276, 1997, pp. 2021-2024.								
1	^-	Jon Gord, Scren		2.0, 1331, pp. 2021 20.	tu Ti				
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			NON PA	TENT LITERATURE DO	OCUMENTS					
		Bowden et al., '	'Spontaneou	s formation of ord	lered struc	tures .	in thin			
18.00	АJ	films of metals supported on an elastomeric polymer," Nature,								
USF		393, 1998, pp. 146-149.								
		Hansen et al., "Cantilever-Based Optical Deflection Assay for								
	AK	Discrimination o	of DNA Sing	le-Nucleotide Mism	natches," A	Anal. Cl	nem.,			
		73(7), 2001, pp. 1567-1571.								
		Thaysen et al., "Cantilever-based bio-chemical sensor integrated in								
	AL	a microliquid handling system," IEEE Workshop on MEMS, 2001,								
V		pp. 401-404.								
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## U.S. PATENT DOCUMENTS

Examiner Initial*		Document Number	Date	Name	Class	Sub Class	Filing Date
CBM	AA	6 050 138	Apr-00	Lynch et al.	73	150A	
	AB	6 201 980	Mar-01	Darrow et al.	600	347	
V	AC	20010016683	Aug-01	Darrow et al.	600	347	
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## FOREIGN PATENT DOCUMENTS

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OTHER DOCUMENTS (Including Author, Title, Date, Pages, Etc.)

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